ABSTRACT

A data processing apparatus comprises a memory store; a data bus connected to the memory store, the data bus being adapted for transporting data to and from the memory store; a processing entity operative to release read and write commands towards the memory store, the write command being accompanied by first data intended to be written to the memory store; and an encryption module communicatively coupled to the processing entity and to the data bus. Upon the processing entity releasing a write command accompanied by said first data, the encryption module encrypts, in accordance with an encryption key, said first data and send an encrypted version of said first data onto the data bus for writing into the memory store. The reverse operation is performed upon the processing entity releasing a read command.